

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1.-7. (Canceled)

8. (Currently Amended) A ~~production~~ method of producing a rat embryonic stem cell ~~which cell, which method~~ comprises ~~performing a process comprising~~ the following steps ~~(A)-(E): (A)-(D), under the culture conditions using a substantially serum-free culture medium:~~

(A) culturing a rat blastocyst in a leukemia inhibitory factor (LIF)-free culture medium to form an inner cell mass in the blastocyst,

~~(A) a step for (B) dissociating an the inner cell mass, wherein the dissociated inner cell mass is in a cell aggregate state, mass formed by the culture of rat blastocysts, remaining a state of cell aggregate,~~

~~(B) a step for (C) culturing primary embryonic stem cells resulting from the a culture of the dissociated inner cell mass until it the primary embryonic stem cells can be passaged,~~

~~(C) a step for (D) dissociating the primary embryonic stem cells, which have become capable of being can be passaged, wherein the dissociated primary embryonic stem cells are in a cell aggregate state, and remaining a state of cell aggregate, followed by passaging and culturing the same,~~

~~(D) a step for further passaging and (E) culturing the dissociated primary embryonic stem cells to establish an embryonic stem cell.~~

9. (Currently Amended) The ~~production~~ method of claim 8, wherein the culture medium comprises a serum replacement reagent.

10. (Currently Amended) The ~~production~~ method of claim 8, wherein ~~the~~ step (B) ~~-(A)-~~ comprises a step for mechanically dissociating the inner cell mass.

11. (Currently Amended) The ~~production~~ method of claim 8, wherein ~~the~~ step (D) ~~-(C)-~~ comprises a step for mechanically dissociating the embryonic stem cells.

12. (Currently Amended) The ~~production~~ method of claim 8, wherein ~~an rLIF-~~
~~free~~ a rat leukemia inhibitory factor (rLIF)-free culture medium is used in step ~~-(A)-~~ (B).

13. (Currently Amended) The ~~production~~ method of claim 8, wherein ~~an rLIF-~~
~~containing~~ a rat leukemia inhibitory factor (rLIF)-containing culture medium is used in steps ~~-(B)-(D)-~~ (C)-(E).

14.-34. (Canceled)

35. (New) The method of claim 8, wherein a substantially serum free culture medium is used in steps (A)-(E).